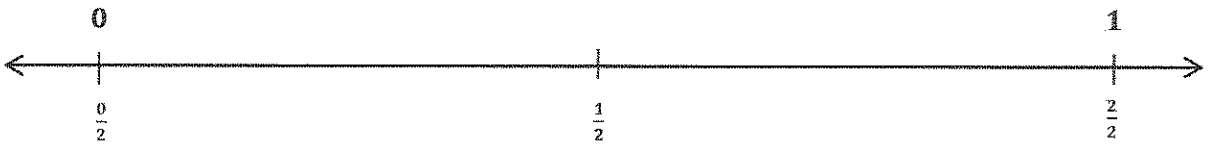
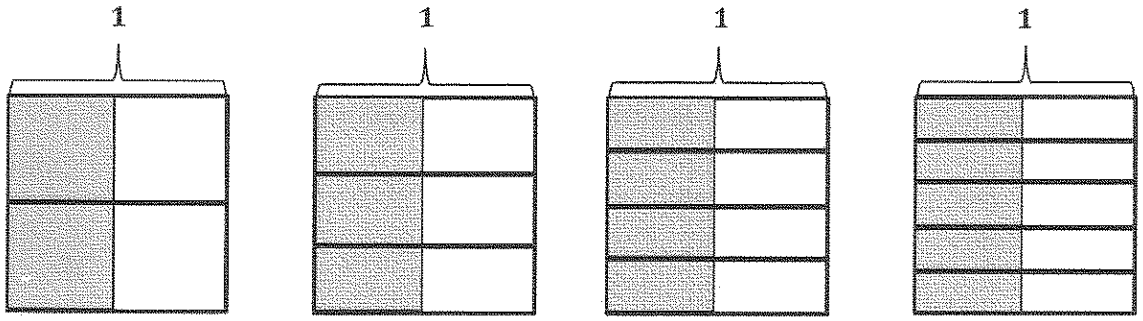
G5-M3-Lesson 1

If I don't have the folded paper strip from class, I can cut a strip of paper about the length of this number line. I can fold it in 2 equal parts. Then, I can use it to label the number line.

1. Use the folded paper strip to mark points 0 and 1 above the number line and $\frac{0}{2}$, $\frac{1}{2}$, and $\frac{2}{2}$ below it.



Draw one vertical line down the middle of each rectangle, creating two parts. Shade the left half of each. Partition with horizontal lines to show the equivalent fractions $\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$, and $\frac{5}{10}$. Use multiplication to show the change in the units.

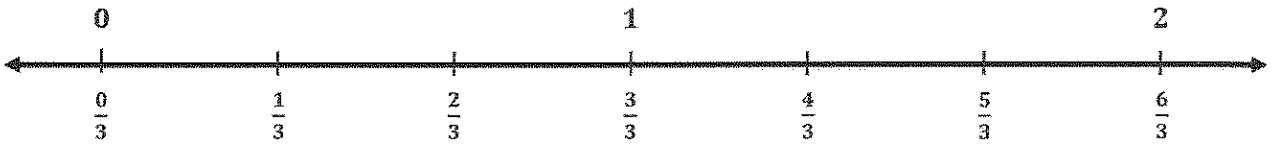


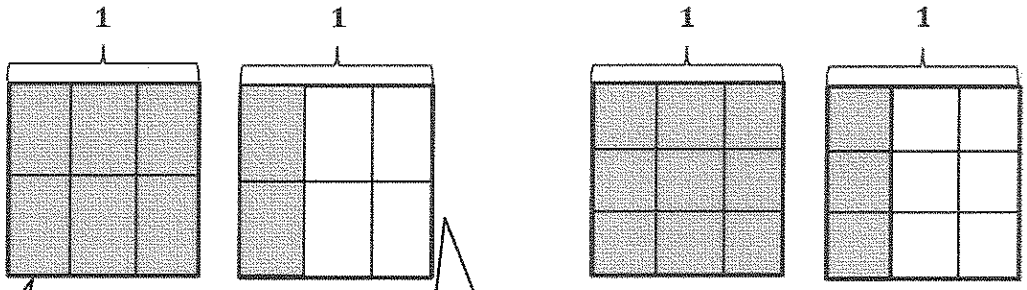
$\frac{1}{2} = \frac{1 \times 2}{2 \times 2} = \frac{2}{4}$ $\frac{1}{2} = \frac{1 \times 3}{2 \times 3} = \frac{3}{6}$ $\frac{1}{2} = \frac{1 \times 4}{2 \times 4} = \frac{4}{8}$ $\frac{1}{2} = \frac{1 \times 5}{2 \times 5} = \frac{5}{10}$

I started with one whole and divided it into halves by drawing 1 vertical line. I shaded 1 half. Then, I divided the halves into 2 equal parts by drawing a horizontal line. The shading shows me that $\frac{1}{2} = \frac{2}{4}$.

I did the same with the other models. I divided the halves into smaller units to make sixths, eighths, and tenths.

2. Continue the process, and model 2 equivalent fractions for 4 thirds. Estimate to mark the points on the number line.





$\frac{4}{3} = \frac{4 \times 2}{3 \times 2} = \frac{8}{6}$

$\frac{4}{3} = \frac{4 \times 3}{3 \times 3} = \frac{12}{9}$

The same thinking works with fractions greater than one. I start by shading 1 and 1 third, which is the same as 4 thirds. To show thirds, I drew vertical lines.

Then, I partitioned the thirds into a smaller unit, sixths, by drawing horizontal lines.